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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/994,264	11/26/2001	Gary Edward Pawlas	35015.003	8615

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EXAMINER

MAKI, STEVEN D

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 12/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/994,264

Applicant(s)

PAWLAS ET AL.

Examiner

Steven D. Maki

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 73-76 and 78-90 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 73-76, 78 and 82-90 is/are rejected.
- 7) ☐ Claim(s) 79-81 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

Art Unit: 1733

1) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

introduce adhesive into gap using perpendicular opening

2) **Claims 73-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishiyama et al (US 5307689) in view of Lanham et al (WO 01/65213) or Gomi et al (EP 997709) and in view of Japan '877 (JP 60-112877) and Storick (WO 95/06562).**

Nishiyama et al, Lanham et al, Gomi et al, Japan '877 and Storick are applied as in paragraph 4 of the last office action dated 8-10-04 (paragraph 4 of the last office action dated 8-10-04 is incorporated herein by reference).

Applicant argues that Nishiyama et al does not talk about or teach how the flow meter is assembled. The examiner disagrees since Nishiyama et al teaches a method of making a flow meter comprising the steps of:

inserting inlet side straight tube part 5a of the sensor tube 5 in inlet 9a of the manifold (leg) 9;

inserting outlet side straight tube part 5b of the sensor tube 5 in outlet 9b of manifold (leg) 9;

penetrating support part (leg) 10 with tip end parts of straight tube parts 5a, 5b;

holding the base end part of the sensor tube 5 using manifold (leg) 9;

holding the tip end part of sensor tube 5 using support part (leg) 10;

Art Unit: 1733

fixing the tube to manifold (leg) 9 and support part (leg) 10.

See figure 1 and col. 3 lines 41-52.

Applicant argues that Nishiyama does not have any description on how it would hold the flow meter in an essentially straight configuration during assembly. Applicant is incorrect since Nishiyama teaches holding the tube using the manifold (leg) 9 and support part (leg) 10. As to the adhesive curing during holding, Nishiyama teaches holding the tube using the legs while fixing the tube to the legs and the secondary art to Japan '877 and Storwick, which motivate one of ordinary skill in the art to fix by introducing adhesive after assembly, teach that such adhesive can be a curable (e.g. epoxy) adhesive.

It is noted that claim 73 reads on the flow tube being *held by the legs* instead of being *held by the fixture block* (claim 78). The use of the fixture block is found in claim 78 instead of claim 73.

3) **Claims 75-76 and 84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishiyama et al in view of Lanham et al or Gomi et al and in view of Japan '877 and Storick as applied above and further in view of Adhesives Technology Handbook and optionally van der Pol (US 6336370).**

Adhesives Technology Handbook and van der Pol are applied as in paragraph 5 of the last office action dated 8-10-04 (paragraph 5 of the last office action dated 8-10-04 is incorporated herein by reference).

Art Unit: 1733

**4) Claims 82 and 83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishiyama et al in view of in view of Lanham et al or Gomi et al and in view of Japan '877 and Storick and as applied above and further of Van der Pol.**

Van der Pol is applied as in paragraph 6 of the last office action dated 8-10-04 (paragraph 6 of the last office action dated 8-10-04 is incorporated herein by reference).

**5) Claims 85-87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishiyama et al in view of Lanham et al or Gomi et al and in view of Japan '877 and Storick and as applied above and further of Cage '827 (US 5753827).**

Cage '827 is applied as in paragraph 7 of the last office action dated 8-10-04 (paragraph 7 of the last office action dated 8-10-04 is incorporated herein by reference).

**6) Claims 88 and 89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishiyama et al in view of in view of Lanham et al or Gomi et al and in view of Japan '877, Storick and Cage '827 and as applied above and further of Cage '060 (US 6439060).**

Cage '060 is applied as in paragraph 8 of the last office action dated 8-10-04 (paragraph 8 of the last office action dated 8-10-04 is incorporated herein by reference).

As to claim 89, applicant's argument that the next flow tube will be assembled using the adjusted predefined locations is not commensurate in scope with the claims and is therefore not persuasive since claim 89 requires "adjusting the predefined locations for the plurality of components based of the result of the tested positions" instead of --assembling the next flow tube using the predefined locations--.

Art Unit: 1733

7) **Claim 90 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishiyama et al in view of in view of Lanham et al or Gomi et al and in view of Japan '877 and Storick and as applied above and further of Japan '709 (JP 5-26709) and McLaughlin (US 3352960).**

Japan '709 and McLaughlin are applied as in paragraph 9 of the last office action dated 8-10-04 (paragraph 9 of the last office action dated 8-10-04 is incorporated herein by reference).

introducing adhesive directly in each gap and using fixture

8) **Claims 73 and 78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishiyama et al in view of Lanham et al or Gomi et al and in view of Binnie et al (US 5837090) and Wiechowski et al (US 4244768).**

Nishiyama et al, Lanham et al, Gomi et al, Binnie et al and Wiechowski et al are applied as in paragraph 10 of the last office action dated 8-10-04 (paragraph 10 of the last office action dated 8-10-04 is incorporated herein by reference).

Applicant argues that Nishiyama et al does not talk about or teach how the flow meter is assembled. The examiner disagrees since Nishiyama et al teaches a method of making a flow meter comprising the steps of:

inserting inlet side straight tube part 5a of the sensor tube 5 in inlet 9a of the manifold (leg) 9;

inserting outlet side straight tube part 5b of the sensor tube 5 in outlet 9b of manifold (leg) 9;

penetrating support part (leg) 10 with tip end parts of straight tube parts 5a, 5b;

Art Unit: 1733

holding the base end part of the sensor tube 5 using manifold (leg) 9;

holding the tip end part of sensor tube 5 using support part (leg) 10;

fixing the tube to manifold (leg) 9 and support part (leg) 10.

See figure 1 and col. 3 lines 41-52.

Applicant argues that Nishiyama does not have any description on how it would hold the flow meter in an essentially straight configuration during assembly. Applicant is incorrect since Nishiyama teaches holding the tube using the manifold (leg) 9 and support part (leg) 10. As to the adhesive curing during holding, Nishiyama teaches holding the tube using the legs while fixing the tube to the legs and the secondary art to Binnie et al and Wiechowski et al, which motivate one of ordinary skill in the art to fix by introducing adhesive after assembly, teach that such introduced adhesive can be a curable (e.g. epoxy) adhesive. When using the technique of introducing adhesive after assembly, Binnie et al motivates holding the tube during introduction and cure of the adhesive so that the tube and legs are held solidly and reliably in the desired positions relative to each other (col. 4 lines 20-27).

Applicant argues that none of the cited art teach how a flow tube extending between two legs can be held in an essentially straight configuration while an adhesive cures. The examiner disagrees. First: The suggestion that the tube should be straight between the legs is found in Nishiyama et al. See figure 1 and description thereof at col. 3 lines 41-52 of Nishiyama et al. Second: The applied prior art teaches how to hold. Nishiyama teaches using the legs to hold. See column 3 lines 41-52 of

Art Unit: 1733

Nishiyama et al. Binnie et al teaches using clamp structures to hold. See col. 4 lines 20-27.

9) **Claims 75-76 and 84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishiyama et al in view of Lanham et al or Gomi et al and in view of Binnie et al and Wiechowski et al as applied above and further in view of Adhesives Technology Handbook and optionally van der Pol (US 6336370).**

Adhesives Technology Handbook and van der Pol are applied as in paragraph 11 of the last office action dated 8-10-04 (paragraph 11 of the last office action dated 8-10-04 is incorporated herein by reference).

10) **Claims 82 and 83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishiyama et al in view of Lanham et al or Gomi et al and in view of Binnie et al and Wiechowski et al as applied above and further of Van der Pol.**

Van der Pol is applied as in paragraph 12 of the last office action dated 8-10-04 (paragraph 12 of the last office action dated 8-10-04 is incorporated herein by reference).

11) **Claims 85-87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishiyama et al in view of Lanham et al or Gomi et al and in view of Binnie et al and Wiechowski et al as applied above and further of Cage '827 (US 5753827).**

Cage '827 is applied as in paragraph 13 of the last office action dated 8-10-04 (paragraph 13 of the last office action dated 8-10-04 is incorporated herein by reference).



Art Unit: 1733

**12) Claims 88-89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishiyama et al in view of Lanham et al or Gomi et al and in view of Binnie et al, Wiechowski et al and Cage '827 as applied above and further of Cage '060 (US 6439060).**

Cage '060 is applied as in paragraph 14 of the last office action dated 8-10-04 (paragraph 14 of the last office action dated 8-10-04 is incorporated herein by reference).

As to claim 89, applicant's argument that the next flow tube will be assembled using the adjusted predefined locations is not commensurate in scope with the claims and is therefore not persuasive since claim 89 requires "adjusting the predefined locations for the plurality of components based of the result of the tested positions" instead of --assembling the next flow tube using the predefined locations--.

**13) Claim 90 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishiyama et al in view of Lanham et al or Gomi et al and in view of Binnie et al and Wiechowski et al as applied above and further of Japan '709 (JP 5-26709) and Mclaughlin (US 3352960).**

Japan '709 and Mclaughlin are applied as in paragraph 15 of the last office action dated 8-10-04 (paragraph 15 of the last office action dated 8-10-04 is incorporated herein by reference).

Art Unit: 1733

**Allowable Subject Matter**

**14) Claims 79-81 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.**

Scrantom et al, directed to method of applying terminations to ceramic bodies, shows the use of apertures and alignment means to align components in a desired manner. However, there is no motivation in the prior art of record including Scrantom and Cage '827, to further modify Nishiyama et al, Lanham et al / Gomi et al, Binnie et al and Wiechowski et al such that a driver is attached to the flow tube using the driver opening and at least one pick off is attached to the flow tube using the at least one pick off opening as set forth in claim 79.

**Remarks**

15) Applicant's arguments filed 10-11-04 have been fully considered but they are not persuasive.

16) **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 1733


the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

17) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven D. Maki  
December 21, 2004

  
STEVEN D. MAKI 12-21-04  
PRIMARY EXAMINER  
~~GROUP 1300~~  
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